Application No.: 10/603,037

Office Action Dated: March 8, 2007

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for improving data processing in connection with a

database <u>having restrictions therein</u>, said method comprising:

defining a dimension comprising a plurality of attributes;

assigning each attribute to a respective column of said database <u>having restrictions</u>

therein;

defining relationships between said attributes, wherein said relationships are not

subject to said restrictions placed on said database and;

accessing said database via said dimension.

2. (Canceled)

3. (Currently Amended) A method in accordance with claim 1, further comprising:

defining at least one hierarchy comprising a sequence of said attributes, at least one of

said attributes included in said defining relationships step.

4. (Original) A method in accordance with claim 3, wherein each hierarchy defines a

drill down path for accessing said database.

5. (Original) A method in accordance with claim 3, wherein a hierarchy contains one

attribute.

Application No.: 10/603,037

Office Action Dated: March 8, 2007

6. (Original) A method in accordance with claim 3, wherein said act of defining said at

least one hierarchy is independent of said database.

7. (Canceled)

8. (Original) A method in accordance with claim 1, wherein said database is a relational

database.

9. (Original) A method in accordance with claim 1, wherein said dimension is utilized

with an on line analysis processing (OLAP) system.

10. (Original) An application programming interface (API) comprising means for

performing the method of claim 1.

11. (Currently Amended) A computer-readable storage medium having computer-

executable instructions for improving data processing in connection with a database having

restrictions therein, by performing acts comprising:

defining a dimension comprising a plurality of attributes;

assigning each attribute to a respective column of said database having restrictions

therein;

defining relationships between said attributes, wherein said relationships are not

subject to said restrictions placed on said database and;

accessing said database via said dimension.

Page 3 of 13

Application No.: 10/603,037

Office Action Dated: March 8, 2007

12. (Canceled)

13. (Currently Amended) A computer-readable medium in accordance with claim 11,

further having computer-executable instructions for defining at least one hierarchy

comprising a sequence of attributes, at least one of said attributes included in said defining

relationships step.

14. (Original) A computer-readable medium in accordance with claim 13, wherein each

hierarchy defines a drill down path for accessing said database.

15. (Original) A computer-readable medium in accordance with claim 13, wherein a

hierarchy contains one attribute.

16. (Original) A computer-readable medium in accordance with claim 13, wherein said

act of defining said at least one hierarchy is independent of said database.

17. (Canceled)

18. (Original) A computer-readable medium in accordance with claim 11, wherein said

database is a relational database.

Application No.: 10/603,037

Office Action Dated: March 8, 2007

19. (Original) A computer-readable medium in accordance with claim 11, wherein said

dimension is utilized with an on line analysis processing (OLAP) system.

20. (Currently Amended) A system for accessing a database <u>having restrictions therein</u>,

said system comprising:

a processor coupled to a storage device, said storage device comprising said database;

a first definition component for defining a dimension comprising a plurality of

attributes;

an assignment component for assigning each attribute to a respective column of said

database;

a second definition component for defining relationships between said attributes,

wherein said relationships are not subject to said restrictions placed on said database;

and

an access component for allowing access to said database via said dimension.

21. (Currently Amended) A system in accordance with claim 20, further comprising:

a third definition component for defining at least one hierarchy within each

dimension, each hierarchy comprising a sequence of attributes, at least one of said

attributes included in a relationship defined by said second definition component.

22. (Original) A system in accordance with claim 21, wherein each hierarchy defines a

drill down path for said access component.

Application No.: 10/603,037

Office Action Dated: March 8, 2007

23. (Original) A system in accordance with claim 21, wherein a hierarchy contains one

attribute.

24. (Original) A system in accordance with claim 21, wherein said third definition

component defines said at least one hierarchy independent of said database.

25. (Canceled)

26. (Original) A system in accordance with claim 20, wherein said system is utilized with

an on line analysis processing (OLAP) system.

27. (Currently Amended) A system for accessing a database <u>having restrictions therein</u>,

said system comprising:

means for defining a dimension comprising a plurality of attributes;

means for assigning each attribute to a respective column of said database;

means for defining relationships between said attributes, wherein said relationships

are not subject to said restrictions placed on said database;

means for accessing said database via said dimension; and

means for defining at least one hierarchy comprising a sequence of said attributes.

28. (Canceled)

Application No.: 10/603,037

Office Action Dated: March 8, 2007

29. (Original) A system in accordance with claim 27, wherein said at least one hierarchy

is defined independent of said database.

30. (Original) A system in accordance with claim 27, wherein said system is an on line

analysis processing (OLAP) system.

31. (Original) A system in accordance with claim 27, wherein said means for defining a

dimension, means for assigning, means for defining relationships, means for accessing and

means for defining at least one hierarchy comprise at least one application programming

interface (API).

32. (Currently Amended) A computer-readable storage medium in accordance with claim

11 comprising a data structure comprising:

the a dimension comprising the a plurality of attributes, wherein each attribute is

bound to a column in a database; and

a logical structure indicative of relationships between said plurality of attributes,

wherein said relationships are not subject to <u>said</u> restrictions placed on said database.

33. (Currently Amended) A data structure in accordance with claim 32, said data structure

further comprising at least one hierarchy comprising a sequence of attributes, at least one of

said attributes included in said defining relationships step.

34. (Original) A data structure in accordance with claim 33, wherein each hierarchy

provides a drill down path for accessing said database.

Application No.: 10/603,037

Office Action Dated: March 8, 2007

35. (Original) A data structure in accordance with claim 33, wherein a hierarchy contains

a single attribute.

36. (Currently Amended) A data structure in accordance with claim 33, wherein each

sequence is defined independent of said restrictions associated with said database.

37. (Currently Amended) A data structure in accordance with claim 32, wherein said

logical structure is defined independent of said restrictions associated with said database.

38. (Original) A data structure in accordance with claim 32, wherein said database is a

relational database.

39. (Original) A data structure in accordance with claim 32, wherein said database is

capable of being utilized with an online analytical processing (OLAP) system.

40. (Currently Amended) A method for retrieving data from a database <u>having restrictions</u>

therein, said method comprising:

receiving a data retrieval request including a dimension, wherein:

said dimension includes a plurality of attributes;

each attribute is assigned to a respective column of said database; and

Application No.: 10/603,037

Office Action Dated: March 8, 2007

at least one relationship relationships between said attributes are <u>is</u> defined, wherein said relationship[[s]] are <u>is</u> not subject to <u>said</u> restrictions placed on said database; and

retrieving said data from said database via said dimension.

41. (Original) A method in accordance with claim 40, further comprising:

providing said retrieved data in response to said data retrieval request.

42. (Currently Amended) A method in accordance with claim 40, said data retrieval request further including at least hierarchy comprising a sequence of said attributes, where at least one of said attributes is included in the said at least one defined relationship.

- 43. (Original) A method in accordance with claim 42, wherein each hierarchy provides a drill down path for accessing said database.
- 44. (Original) A method in accordance with claim 42, wherein a hierarchy contains a single attribute.
- 45. (Currently Amended) A method in accordance with claim 42, wherein each sequence is defined independent of <u>said</u> restrictions associated with said database.
- 46. (Currently Amended) A method in accordance with claim 40, wherein said relationships between said attributes are defined independent of <u>said</u> restrictions associated with said database.

Application No.: 10/603,037

Office Action Dated: March 8, 2007

47. (Original) A method in accordance with claim 40, wherein said database is a relational database.

48. (Original) A method in accordance with claim 40, wherein said database is capable of being utilized with an online analytical processing (OLAP) system.